

REMARKS

The interview between Examiner Olga Asinovshy and attorney Richard Lazarus on February 9, 2005 is acknowledged with appreciation. The Examiner's summary of the interview is accurate as to what transpired. At the interview the changes to the specification were discussed and it was agreed that the changes are supported by the Kraton, Quintac, etc., documents which demonstrate the styrene content in these copolymer products. Copies of these documents accompany the present response to the December 13, 2005 final office action. The relied on prior art was discussed and it was agreed that such prior art does not teach or suggest the subject matter of the present claims

Claims 1-55 are pending in this application. Claim 33 has been amended to be consistent with the other independent claims. No new claims have been added. No new matter has been added.

Reconsideration and allowance of this application is respectfully requested.

Rejections Under 35 U.S.C.112

In the Office Action mailed December 13, 2005, the Examiner rejected claims 1, 33 and 44 as failing to comply with the written description requirement. The specification has been amended to include the styrene content of some of the known copolymer products. Copies of product data sheets or product specification documents of these copolymer products are included with this response. The styrene content of these products is inherent and is readily recognized by persons of ordinary skill in the art. If a patent application discloses a device or a product that inherently has a property or performs a function, the patent application may later be amended to recite the function or property without introducing new matter. *See In re Reynolds*, 443 F.2d 384, 170 USPQ 94 (CCPA 1971); *In re Smythe*, 480 F. 2d 1376, 178 USPQ 279 (CCPA 1973); and *Schering Corp. v. Amgen Inc.*, 222 F.3d 1347, 1352 (Fed. Cir. 2000) ("The fundamental inquiry is whether the material added by amendment was inherently contained in the original application"); *See also* MPEP 2163.07(a).

Compositions listed under Table 1 (page 9 of the instant specification) and various compositions mentioned throughout the specification relate low styrene content copolymers in adhesive mixtures. Comparison of various compositions at different conditions are also listed under Table 2 and discussed throughout the specification. Therefore, benefits of using a low

styrene content adhesive are supported in the specification, contrary to Examiner's mention on page 3 of the Action. Therefore, amendments to claims 1, 33, and 44 are supported by the specification and amendments to the specification to merely recite the inherent styrene content do not constitute new matter.

Rejections Under 103(a)-Claims 1, 4, 7-12, 16, 18, 19, 21, 23 and 44-49

In the Office Action mailed June 9, 2005, the Examiner rejected claims 1, 4, 7-12, 16, 18, 19, 21, 23 and 44-49 under 35 U.S.C. 103(a) as being unpatentable over Hatfield et al. (U.S. Patent No. 6,184,285) in view of Tungseth et al (U.S. Patent No. 4,001,167) or Hansen et al., (U.S. Patent No. 5,891,957). Claims 1, 33 and 43 have been amended previously and discussed in an earlier filed response.

On page 3 of the Action, the Examiner refers to comparative Example 2 and 4 in Hartfield and states that Hartfield discloses Kraton D1107 and D1117.

Comparative Example 4 of Hartfield states the following:

COMPARATIVE EXAMPLE 4

A hot melt adhesive composition outside of the teachings of the present invention was prepared and tested according to the procedure outlined in Example 1.

Comparative Example 4 represents a formulation based on a blend of a high styrene, 43% styrene, A-B-A-B-A multi-block styrene butadiene copolymer (12 MFI) (Stereon 840A) and a low styrene, 15% styrene, SIS A-B-A tri-block copolymer (19% diblock, 11 MFI) (Kraton D-1107). (col. 6, Ins. 55-60).

In addition, Table I (Column 7), mentions that Comparative Example 2 has 9.12 wt. % of Kraton D-1184 and 4.9 wt. % of Kraton D-1117, which are outside the 10-40 wt. % limitation in independent claims 1, 33 and 43. Comparative Example 4 on Table I, has 9.0 wt. % Kraton D-1107, which is outside the 10 to 40 wt. % of a styrene-isoprene block copolymer limitation in claims 1, 33 and 43.

Furthermore, Hatfield et al. describe the following regarding styrene content:

a hot melt construction adhesive composition which comprises a blend of a styrene-butadiene (SB) block copolymer containing greater than about 25 weight percent styrene and a styrene-isoprene (SI) block copolymer containing greater than about 25 weight percent styrene, said hot melt construction adhesive composition possessing a viscosity of no greater than

about 25,000 mPa•s at about 140° C., a shear adhesion failure temperature (SAFT) of at least about 60° C. and a static shear time to failure of no less than about 25 hours at about 23° C., i.e., at room temperature.

(See, Summary of the Invention, col. 2).

Thus, Hartfield's disclosure teaches away from the disclosure in the pending claims. Applicants' claims, as amended previously, recite "about 10 to about 40 wt. % of a styrene-isoprene block copolymer having from about 14% to about 20% styrene by weight." Given the absence of teaching of the limitation—10-40 wt. % of a styrene-isoprene block copolymer that has about 14-20 wt. % styrene—and the teaching away disclosure "greater than about 25 weight percent styrene", Hartfield in view of in view of Tungseth et al (U.S. Patent No. 4,001,167) or Hansen et al., (U.S. Patent No. 5,891,957) does not render the claims obvious. Tungseth and Hansen merely disclose the styrene content of Kraton D1107 and D1117 and there is no motivation in Hartfield to combine Tungseth and Hansen because Hartfield teaches away from using a low styrene content styrene-isoprene block copolymer as in the pending claims. Therefore, the examiner has not established a *prima facie* case of obviousness. Even if these references were properly combined, the claim limitations—about 10 to about 40 wt. % of a styrene-isoprene block copolymer having from about 14% to about 20% styrene by weight—are not disclosed or suggested by the combination. Obviousness requires a suggestion of all limitations in a claim. *CFMT, Inc. v. YieldupInt'l Corp.*, 2003 U.S. App. LEXIS 23072 (Fed. Cir. 2003). To properly combine two references to reach a conclusion of obviousness, there must be some teaching, suggestion or inference in either or both of the references, or knowledge generally available to one skilled in the art, which would have led one to combine the relevant teachings of the two references. *Ashland Oil, Inc. v. Delta Resins and Refractories, Inc. et al.* 776 F. 2d 281 (Fed. Cir. 1985). References that teach away cannot serve to create a *prima facie* case of obviousness. *In re Gurley*, 27 F.3d 551, 553, 31 U.S.P.Q.2D (BNA) 1130, 1132 (Fed. Cir. 1994).

Applicants request that the rejection under 35 U.S.C. 103(a) in view of Hatfield et al. be withdrawn.

Rejections Under 103(a)—Claims 2-3, 5-6, 13, 15, 17, 20, 24-43 and 50-55

The Examiner rejected claims 2-3, 5-6, 13, 15, 17, 20, 24-43 and 50-55 under 35 U.S.C. 103(a) as being obvious over Hatfield et al. in view of Sasaki et al. (U.S. Patent No. 5,663,228). As noted above, claims 1, 33 and 44 have been previously amended.

The Examiner notes at page three of the Office Action mailed 6/9/05, that Hatfield et al. “does not disclose antioxidant for the present claim 2, high amount of styrene-isoprene block copolymer in an adhesive composition for the present claims 5-6, and a single glass transition temperature for the present claims 24, 33, 50.” Applicants further point out that Hatfield et al. describe styrene-isoprene copolymers having greater than about 25 weight percent styrene content, while Applicants’ presently amended claims require styrene-isoprene polymer styrene content of from about 14 percent to about 20 percent by weight.

On page 4 of the present Action, the Examiner notes that “In Hatfield [sic] the styrene-isoprene block copolymer having a low styrene content can be selected”. As discussed earlier, Hatfield teaches away from the pending claims in requiring a styrene content of greater than 25% for the styrene-isoprene (SI) block copolymer. Therefore, a person of ordinary skill in the art, given the teachings of Hatfield would not have been motivated to select a copolymer having the requisite styrene content and formulate an adhesive composition of the pending claims 2-3, 5-6, 13, 15, 17, 20, 24-43 and 50-55.

Sasaki et al. fails to provide the missing teaching of Hatfield et al. Therefore, Applicants respectfully submit the combination of Hatfield et al. and Sasaki et al. fails to establish a *prima facie* case of obviousness, and request the withdrawal of such rejections.

Furthermore, the Examiner’s reliance on the teaching of Figure 3 of Sasaki et al. appears to be misplaced. The plot of tangent delta in Figure 3 relates to a pre-compounded blend of only elastomers, not a complete adhesive formulation as recited by the present claims. Sasaki et al. also note that the single peak is “adverse to processability” (Col. 6, lines 4-5). Sasaki et al. teaches the formulation of adhesives such that two distinct glass transition temperatures are present.

On page 5 of the Action, the Examiner notes “because both references disclose analogous composition and a single Tg can be controlled by the selected tackifier (having desired softening point) and that said tackifier is preferably soluble in the polyisoprene component in the S-I block copolymer...”. Sasaki, precisely, teaches against such a selection by stating that the single peak

is "adverse to processability" (Col. 6, lines 4-5). The Examiner imputes impermissible hindsight and unsuccessfully attempts to fill the missing information from Hartfield in combination with Sasaki.

Therefore, Applicants request withdrawal of the 103(a) rejection.

Conclusion


Applicants submit that the claims are in condition for allowance and respectfully request the same. The Examiner is invited to call the undersigned attorney to discuss any outstanding issues or concerns so that allowance of the present application may be expedited.

If needed, Applicant hereby petitions for an appropriate extension of time and entry of this Amendment. The Commissioner is also hereby authorized to charge any required additional fees to Deposit Account No. 12-0913 referencing Attorney Docket number 921142-96499. The Applicants therefore respectfully request favorable reconsideration and allowance of this application.

Respectfully submitted,

BARNES & THORNBURG LLP

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Mark A. Hagedorn
Registration No. 44,731

Barnes & Thornburg LLP
P.O. Box 2786
Chicago, Illinois 60690-2786
(312) 357-1313 phone
(312) 214-4808 direct line
(312) 759-5646 facsimile
mhagedorn@btlaw.com